

KEKCHAYEV K.KH., KRAVKOV, S.V., and SHVARTS, L.A.

. On the factors which reduce the activities of the organs of vision and hearing. Invest. Akad. ped. nauk. RSFSR, 1947, No.3.

KEKCHAYEV, K. Kh (Prof)

"Reflex Variations of Adaptation-Trophic Effects of the Vegetative Nervous System on the  
Excited Tissues of the Human Organism." (Book) c 1948

ORBELI, L.A., redaktor; BAKENKOV, I.P., redaktor; ANOKHIN, P.K., redaktor  
KEKCHAYEV, K.KH., redaktor; KAS'YANOV, V.M., redaktor; MUZYKANTOV,  
V.A., redaktor; KIRSANOVA, N.A., tekhnicheskiy redaktor.

[Joint session commemorating the tenth anniversary of the death  
of I.P. Pavlov. Proceedings.] Ob"edinennaya sessiya, posviashchen-  
naya desyatiletiiu so dnia smerti I.P. Pavlova. Trudy; redaktsion-  
naya kollegiya: L.A. Orbeli [i dr.]; sekretari redaktsionnoi  
kollegii V.M. Kas'ianov i B.A. Muzykantov. Moskva, Izd-vo Akademii  
meditsinskikh nauk, 1948. 326 p. (MLRA 8:8)  
(Psychology, Physiological)

KEKCHYEYEV, K. Kh. (Prof)

"Hygiene for Mental Workers" (Book), c. 1949

PERCHENEV, V. N.

PA 41/49T71

USSR/Medicine - Literature, Medical      Mar 49  
Medicine - First Aid

"List of Medgiz Books Available for Purchase" 1 p

"Tel'dsher i Akusherka" No 3

Includes following books: Ya. G. Dubrov's "First  
Aid for Underground Workers," V. F. Zelenin's  
"Hypertonic Diseases," and K. Kh. Kekcheyev's  
"Hygiene for Mental Workers."

41/49T71

1. FEIDOROVICH, L. V.; KIKICHEYEVA, N. Kh.

2. USSR (600)

4. Space Perception

7. Results of conducting lessons and solving problems in projective drawing. Izv. Akad. ped. nauk RSFSR No. 21, 1949.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

Y. I. YAKA, H. Ph.

Mathematics - Study and Teaching

Tasks of the mathematical committee in the Moscow City School, no. 20, Mat. v. shkole, No. 3, 1951.

Monthly List of Russian Accessions. Library of Congress. November 1952. Unclassified.

KEKCHAYEVA, M.Kh.; PERLOVSKAYA, R.I. (Moskva)

Work of subject commissions on mathematics. Mat.v shkole no.4:  
55-58 J1-Ag '60. (MIRA 13:9)  
(Mathematics--Study and teaching)



RECEIVED N G.

USSR/Medicine - Q-Fever

FD-2810

Card 1/2            17, 12/19

Author            : Kekcheyeva, N. G. and Kokorin, I. N.

Title             : Experimental Q- rickettsioses in white mice

Periodical        : Byul. eksp. biol. i med. 6, 46-47, 1955

Abstract         : To produce experimental Q-fever in white mice in the laboratory, they were given intraperitoneal, intravenous, subcutaneous, or parenteral injections of a dry toxic culture of Rickettsia burneti. Intraperitoneal injection was followed by a generalized, not always fatal infection. The mice were more susceptible to intravenous infection which centered mostly in the spleen. The mice were only slightly susceptible to subcutaneous injections. There was slight hyperemia and necrosis of the subcutaneous cells at the point of injection. When the culture was given "per os" no changes in the organs nor rickettsia could be observed. The first two methods established immunity against later injections and produced serological changes in the blood serum. Complement fixing antibodies appeared on the 5th day after injection and reached their maximum on the 23rd to 24th day. Authors intend to use the above method in their future investigation of chemotherapy and vaccination. No references; photomicrographs.

Card 2/2

FD-2810 .

Institution : Division of Rickettsioses (Head Acting Member Academy Medical Sciences USSR P. F. Zdrodovskiy) Institute Epidemiology and Microbiology imeni Gamaleya (Dir: Acting Member Academy Medical Sciences USSR G. V. Vygodchikov) Academy Medical Sciences USSR, Moscow

Submitted : 4 Nov 1954

KEKCHYEVA, N.G.

Experimental chemotherapy of Q fever. Zhur.mikrobiol. epid i immun.  
no.6:60-63 Je '55. (MLRA 8:9)

1. Iz otdela rikketsiozov (zav.-prof. P.F. Zdradovskiy) Instituta  
epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR (dir.prof.  
G.V. Vygodchikov)

(Q FEVER, experimental,  
eff. of antibiotics)  
(ANTIBIOTICS, effects,  
on exper. Q fever)

VASIL'YEVA, L.V.: KOKORIN, I.N.: KEKCHYEVA, N.G.: YABLONSKAYA, V.A.

Experimental Q fever and its histology in guinea pigs. Zhur.  
mikrobiol.epid. i immun. no.6:54-60 Je '55 (MLRA 8:9)

1. Iz otdela rikketsiozov (zav.-prof. P.F. Zdrodovskiy) Insti-  
tuta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR  
(dir.-prof. G.V.Vygodchikov)

(Q FEVER, experimental,  
histol.aspects)

KEKCHETEVA, N.G.

Effect of chemotherapy on the course of experimental infection and immunity in vesicular rickettsiosis in mice. Zhur.mikro-biol. epid. i immun. no.6:64-67 Je '55. (MLRA 8:9)

1. Iz otdela rikketsiozov (zav.-prof. P.F. Zdrodovskiy) Instituta epidemiologii i mikrobnologii imeni N.F. Gamalei AMN SSSR (dir. prof. G. V.Vygodchikov)

(RICKETTSIAL DISEASES, experimental,  
eff. of antibiotics)

(ANTIBIOTICS, effects,  
on exper. rickettsial dis.)

KEKCHYEVA, N.G.

1958 Experimental Q-fever in white mice. Zh. Mikrob. i Inf. Zb. Biol. 1958, Abstr. No. 75568. A description is given of the course of Q-fever in white mice infected by various routes. Subcutaneous and peroral methods of inoculation with rickettsiae. The mice proved to be more susceptible to infection by the first two routes. Sporadicity was found early in the infection. Mice with small doses of rickettsiae were found to have rickettsiae in regional lymphatic glands, sometimes in the lungs. Mainly cases of rickettsiae is reported in the epithelium of the renal tubules, whence they escaped into the lumen of the tubules and were discharged with the urine. The susceptibility of mice to intra-abdominal infection lessens rapidly with their age. No such relation was observed with i.v. inoculation, which even in adult mice (weight 20-22 g) gave rise to severe infections. The mice were only slightly susceptible to subcutaneous inoculation. When rickettsiae were introduced through the blood into the internal organs, rickettsiae were recovered, nor were histological changes observed. Transmitted illness produced immunity to challenge and brought changes in the blood. The white mouse can be regarded as an experimental model for the study of Q-fever. (Russian)

BARBARO

2

KOKCHERYVA, N.G.; KOKORIN, I.N.

Vaccination and chemovaccine therapy in Q fever in white mice.  
Zhur.mikrobiol.epid. i immun. 27 no.11:46-49 N '56. (MLRA 10:1)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei  
AMN SSSR.

(CHLORTETRACYCLINE, effects,  
on exper. Q fever, with vacc. (Rus))

(Q FEVER, experimental,  
eff. of vacc. alone & vacc. with chlortetracycline  
ther. in white mice (Rus))



KEKCHYEVA, N.G. (Cand. of Med. Sci.)

"Experimental Chemotherapy of Vesicular Rickettsiosis and Q Fever,"

p. 189 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.

KEKCHYEVA, N.G.

Experimental solution of chemico-vaccination prophylaxis of rickettsial infections [with summary in English]. Vop.virus 3 no.4:206-210  
Jl-Ag '58 (MIRA 11:9)

1. Otdel rikketsiozov Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(RICKETTSIAL DISEASES, experimental  
chem.prev. & vacc (Rus))

MEKCHYEVA, N. K.

"Microcultures of Tubercular Bacteria on Synthetic Media." Sub 11 Jun  
51, First Moscow Order of Lenin State U.

Dissertations presented for science and engineering degrees in Moscow  
during 1951.

SO: Sum. No. 480, 9 May 55.

KEKCHYEVA, N. K.

USSR/Medicine - Q-Fever

FD 154

Card 1/1

Author : Kulagin, S. M. and Kekcheyeva, N. K.

Title : The study of Q-fever in the USSR

Periodical : Zhur. mikrobiol. epid. i immun. 5, 48-55, May 1954

Abstract : The etiology, differential diagnosis procedures, clinical picture, results of serological examinations, and epidemiological data on the first few cases of Q-fever detected in the USSR from 1950-1953 are discussed in detail. No references are cited.

Institution : The Typhus Laboratory (Head-Prof. P. F. Zdrodovskiy) of the Institute of Epidemiology and Microbiology imeni N. F. Gamaleya, Academy of Medical Sciences, USSR (Director - Prof. V. D. Timakov)

Submitted : September 1, 1953

KEKCHYEVA, N. K., and KULAGIN, S. N.

"The Study of Q Fever in the USSR" [both Kulagin, S. M., and Kekcheyeva, N. K. have also been identified with the Division of Rickettsiosis] Proceedings of Inst. Epidem and Microbiol im. Gamaleya ~~AMS~~ 1954-56.

Typhus Laboratory, Zdrodovskiy, P. F., professor, Active Member, of Academy of ~~Medical~~ Sciences USSR, head, Inst. Epidem and Microbiol im. Gamaleya AMS USSR

SO: Sum 1186, 11 Jan 57.

KEKCHYEVA, N.K.

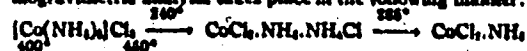
Experiments on chemovaccinal prophylaxis of rickettsioses  
(examination of the stability of induced asymptomatic forms  
of infection). Vop. virus. 9 no.3:331-335 My-Je '64.

(MIRA 18:1)

1. Otdel rikketsiozov Instituta epidemiologii i mikrobiologii  
imeni N.F. Gamalei AMN SSSR, Moskva.

KEKEDY, E.

Thermal decomposition of complex compounds. II. The thermal decomposition of hexamminecobalt chloride in an ammoniacal atmosphere. Ladislav Kekedy, Arpad Szurkos, Paul Kröbl, and Elisabeth Kekedy. *Acad. rep. populare Romine, Filiale Cluj, Studii si Cercetari chim.* 9, 79-89 (1958); cf. *Bul. stinț. Univ. "V. Babes" p. Bolyai, Cluj, Ser. stiint. nat.* 2, 99 (1958).—The thermal decompos. of luteocobaltic chloride in an ammoniacal atm. under conditions of thermogravimetric analysis takes place in the following manner:



$\xrightarrow{400^\circ} \text{CoCl}_2 \rightarrow \text{Co}$ . Under certain conditions (isothermal heating to 215-220°), the purpureocobaltic chloride is obtained. The transition from luteocobaltic chloride to purpureocobaltic chloride takes place through an intermediate compd.  $\text{CoCl}_2 \cdot 5/6 \text{NH}_3$ . The transition of the luteocobaltic chloride in purpureocobaltic chloride was proved also by differential thermal analysis. This method also has proved the elimination of one mole of  $\text{NH}_4\text{Cl}$  from  $\text{CoCl}_2 \cdot \text{NH}_3 \cdot \text{NH}_4\text{Cl}$ . In this study, ammonia was used at atm. pressure and the quantities of substances were 50-150 mg. in a crucible of 10 mm. diam. III. The thermal decomposition of hexamminecobalt chloride in air. Ladislav Kekedy, Arpad Szurkos, Elisabeth Kekedy, and Paul Kröbl. *Ibid.* 91-100 (1958).—The thermal decompos. of luteocobaltic chloride in air was studied. The first compd. formed is the praseocobaltic chloride. The differential thermal analysis curve shows that, before decompos., the praseocobaltic chloride undergoes an exothermal transformation without variation of wt., changing from green to violet with the same analytical compn. It seems that the *trans*-praseocobaltic chloride is transformed into *cis*-praseocobaltic chloride. From this study it may be said that all the changes observed take place according to the trans law of action. This may be the cause why in an ammoniacal atm. only the purpureocobaltic chloride is formed, and in air only the praseocobaltic chloride.

C. Heltner-Wirgin

2742 (May)

4E2C (j) 5

COUNTRY : ROMANIA

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721420012-2"

ABS. JOUR. : RZKhim., No. 1 1960, No.693

AUTHOR : Kekedy, L.; Szurkos, A.; Kekedy, E.; Kröbl, P.  
INST. : Rumanian AS, Cluj Affiliate

TITLE : On Thermic Decomposition of Complex Compounds.  
III. Thermic Decomposition of Hexammine-Cobalt Chloride in Air

ORIG. PUB. : Studii si cercetari chim. Acad. RPR Fil. Cluj, 1958, 9, No 1-4, 91-100

ABSTRACT : The thermic decomposition of  $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$  in air in the temperature interval of 0-700° was investigated. It was established that  $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$  transforms upon decomposition, splitting off two molecules of  $\text{NH}_3$ , into *trans*- $[\text{Co}(\text{NH}_3)_4\text{Cl}_2]\text{Cl}$  which, prior to further decomposition, transforms into a violet salt of the same composition, apparently into *cis*- $[\text{Co}$ -

CARD: 1/2

C-10

AAAE41, E1

1  
/ Thermal decomposition of complex compounds. L. Kékedy, P. Kröbl, A. Szurkos, and B. Kékedy, *Studia univ. "Victor Babes" et Bolyai* 3, No. 3, Ser. 1, No. 2, 99-110 (1958).—The thermal decompn. of hexammine-cobalt complexes was studied by the thermal-analysis method proposed by Erdey and Paulik (CA 50, 3952e). By measuring the decompn. temp. and the heat of formation of the complex compds., it was observed that the stability of the compds. with identical internal coordination spheres, decreases with the increasing vol. of the external-sphere anion. Also, the halide concn. in the decompn. products of compds. contg. halide ions in the external sphere decreases with increasing ionic radius of the compd.

J. Tadmor...

5  
1. JKG(NB)



✓ Cobalt(III)-amine derivatives of periodic acid. III. A study of physicochemical and crystallographical properties. Cs. Várhelyi, B. Kékedy, and A. Gots. *Acad. rep. populare Romina, Filiala Cluj, Studii cercetari chim.* 10, 251-68 (1959); cf. *CA* 54, 9587c.—Eighteen aminocobalt(III) derivs. of periodic acid were studied. Their solubilities, sp. grs., thermogravimetric analysis, and crystallographic properties are given. It was found that the orthoperiodates of the pentamminecobalt(III) mono acid type have very similar properties. New synthesis methods are given for the metaperiodates of diacidotetramminecobalt(III) complexes:  $trans-[Co en_2(NO_3)_2]IO_6$ ,  $trans-[Co en_2Br_2]IO_6$ ,  $trans-[Co(NH_3)_4Cl_2]IO_6 \cdot H_2O$ , and  $trans-[Co py_2Cl_2]IO_6$ . J. Tadmor

4  
2-faj (NB) (may)

11  
alt

Universitatea "Bolyai" - Cluj, Catedra de chimie anorganică,  
analitică și de mineralogie.

VARHELYI, Cs.; KEKEDY, E. —

Thermogravimetric study on the formation and stability of  
periodates. Studia Univ B-B S. Chem 7 no.1:11-25 '62.

RIPAN, Raluca, acad.; VARHELYI, Cs.; KEKEDY, E.

Derivatives of cobaltic bis-dimethylglyoximate-bis- $\beta$ -picoline.  
Studia Univ B-B S. Chem 7 no.2:89-98 '62.

REKEDY, L.

Polysyngnetic determination of aluminum in a sodium  
malicylate solution

add 1 drop of 1% solution of sodium malicylate to the solution

tin solution (final concentration 0.25%) is added and the  
flask is filled up to the mark with a solution containing  
74.55 g of KCl, 3.70 g of citric acid and 58.99 g of  $\text{Na}_2\text{HPO}_4$   
at pH = 7. After stirring, a part of the solution is trans-  
ferred into an electrolyzer,  $\text{O}_2$  is removed by passing  $\text{H}_2$  flow

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721420012-2"

Card

Boljai László, Péter

ROMANIA/Analytical Chemistry - Analysis of Organic Substances

E-3

Abs Jour : Ref Zhur - Khiniya, No 4, 1958, No 11081

in the duration of 5 min. and the intensity of the dif-  
fusion current is determined by the usual method of by the  
"two point" method. The content of I in the analyzed sample  
is found using calibrating curves. II does not produce any  
wave on the above mentioned background, but I produces two  
waves ( $E_1 = -0.99$  v and  $E_2 = -1.35$  v), which correspond to  
two phases of the CO group reduction. The wave height is pro-  
portional to the concentration of I, if it was between 25  
and 250  $\mu\text{g/mlit}$ .

KEYEDY, L. AND OTHERS.

Contributions to the study of thermal decomposition of complex compounds. II. Thermal decomposition of the hexamine-cobalt (III) chloride in the atmosphere of ammonia. III. Thermal decomposition of the hexamine-cobalt (III) chloride in the air. p. 79.

Academia Republicii Populare Romine. Filiala Cluj. STUDII SE CERCETARI DE CHIMIE. Cluj, Rumania. Vol. 9, no. 1/4, Jan./Dec. 1958.

Monthly List of East European Accessions (EEAI) Vol. 8, no. 7, July 1959.

Uncl.

KRAMPY, Ladislav; BALOGH, Gertrud

Complexometric determination of bismuth and lead in the presence of gallic acid as an indicator. Studia Univ B-S S. Chem 7 no.1:109-118 '62.

KEKEDY, L.; MAKKAY, F.

New analytic applications of xanthates. Studia Univ B-B S. Chem  
7 no.1:135-144 '62.

KEKEDY, L.; MAKRAY, F.

New analytic applications of xanthogenates Pt. 3. Studia Univ B-B S.  
Chem 7 no.2:105-109 '62.



KEKEDY, L.; BALOGH, G.

Photocolorimetric determination of bismuth with gallein. Studia  
Univ B-B S. Chem 7 no.2:131-138 '62.

KEKEDY, L.; BALOGH, G.

Photocolorimetric determination of thorium with gallein.  
Studia Univ B-B S Chem 8 no.1:199-204 '63

Gallein, a new metallochromic indicator for the complexometric determination of thorium. Ibid.: 205-206

Photocolorimetric determination of zirconium with gallein.  
Ibid.:207-213

KEKEDY, L.; MUZSNAY, Cs.

Contributions to the development of conductometry in direct  
current. Studia Univ B-B S Chem 8 no.1:504 '63

1. Babes-Bolyai University, Cluj.

KEKEDY, P.

L. Kollar and P. Kekedy

"On the influence of creeping on stress and deformation of statically  
indetermined steel structures,"

Bauplanung Bautechnik, October 1955

Mr. [redacted]

Rheologic investigation of dough rising.

P.76 (BIBLIOWSKI IIAR) Budapest, Hungary Vol. II, No. 3/4, June/July 1967.

30: Monthly Index of East European Accessions (MEEI) Vol. 6, No. 11 November 1957.

KEKEDY, P.

Preserved bread.

p. 176 (Elelmezési Ipar. Vol. 11, no. 7/8, Oct. 1957. Budapest, Hungary)

Monthly Index of East European Accessions (SEAI) 10. Vol. 7, no. 2,  
February 1958

KEKEDY, Pal, okleveles mernok, irányító tervező

Dimensioning of high-strength stressed bolts. Melyepitestud szemle  
14 no.6:264-268

KEKEDY, Palne, dr.

Rheology of the fermentation of dough. Elelm ipar 11 no.3/4:76-82  
Je-Jl '57.

ACCESSION NR: AP4019862

8/0181/64/006/003/0936/0938

AUTHORS: Iglitsy<sup>n</sup>, M. I.; Kekelidze, G. P.

TITLE: Effect of dislocations on changes in optical absorption during heat treatment of silicon

SOURCE: Fizika tverdogo tela, v. 6, no. 3, 1964, 936-938

TOPIC TAGS: crystal lattice dislocation, optical absorption, optical activity, dislocation effect

ABSTRACT: The authors have studied the nature of optically active oxygen in silicon, attempting to explain the role of dislocation in changing the optical properties of silicon during heat treatment. In particular, changes in optical absorption were studied for the wave length 9.0 microns during prolonged heat treatment at 1000C with different dislocation densities. Two series of samples were studied (n-type and p-type), with resistivities ranging from 0.8 to 185 ohm cm and doped with Sb and B respectively. The first series had a dislocation density of  $10^3 \text{ cm}^{-2}$ , the second a range in dislocation densities, none exceeding  $10 \text{ cm}^{-2}$ . The effect of dislocations on optical absorption is summarized in Fig. 1 on the

Cord 1/3



ACCESSION NR: AP4019862

Enclosure. The results obtained confirm the view that oxygen dissolved in Si is redistributed during deformation, joining with Si to form  $\text{SiO}_2$ . Differences in behavior of Si samples having different distribution densities point to a definite role of dislocations in the formation of optically active oxygen. The growth of the absorption coefficient (for  $\lambda = 9.0 \mu$ ) in samples with a dislocation density of  $10^3 \text{ cm}^{-2}$ , at the beginning of heat treatment, may be associated with secondary settling of oxygen at dislocations and with the transition of this oxygen to the optically active state. In specimens free of dislocations this is impossible, and heat treatment leads to decay of optically active oxygen. Any optically active oxygen present in dislocation-free Si is apparently associated with other defects, and the bond with these defects appears to be weaker than with dislocations. Orig. art. has: 2 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoey promyshlennosti, Moscow (State Scientific Research and Planning Institute of the Rare-Metal Industry)

SUBMITTED: 30Sep63

DATE ACQ: 31Mar64

ENCL: 01

SUB CODE: OP, SS

NO REF SOV: 000

OTHER: 004

Card 2/3

ACCESSION NR: APL019862

ENCLOSURE: 01

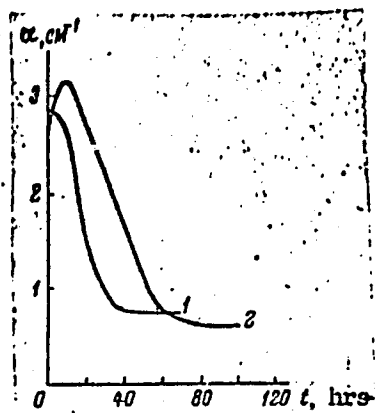


Fig. 1. Dependence of the coefficient of optical absorption (for a wave length of 9.0 microns) on the length of heat treatment. 1 - dislocation-free Si; 2 - Si with dislocation density of  $10^3 \text{ cm}^{-2}$ .

Card 3/3

L 63573-65 EWA(c)/EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t) IJP(c) JD

ACCESSION NR: AP5011922

UP/0363/65/001/003/0311/0315

AUTHOR: Iglitsyn, M. I.; Kekelidze, G. P.; Layner, L. V.; Mil'vidskiy, M. G. 36  
B

TITLE: Some characteristics of the behavior of silicon during thermal treatment 16

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 3, 1965, 311-315 27

TOPIC TAGS: silicon, single crystal, thermal treatment, semiconductor, lattice defect, crystal impurity

ABSTRACT: The effect which thermal treatment of silicon monocrystals (at 1000°C for 10 to 90 hours) has on specific resistance, concentration and the mobility of principal current carriers was studied. *n*- and *p*-silicon crystals were grown in vacuum and inert atmosphere with various concentrations of oxygen by the Czochralski method. The density of lattice defects in these single crystals varied from zero to  $1.10^4$  per  $\text{cm}^2$ . The Hall effect was used as a measure of concentration and mobility of the current carriers. Specific resistance of both *n*- and *p*-type samples of silicon single crystals increases with the duration of the thermal treatment. It is postulated that during thermal treatment atoms of oxygen interact with impurities present in silicon single crystals with resultant formation of either electrically

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L 63573-65

ACCESSION NR: AP5011922

charged or neutral complexes. In the case of electrically charged complexes their charge is different in p- and n-type samples since in both cases thermal treatment results in an increase in resistivity. The density and mobility of the current carriers in both n- and p-type silicon single crystals diminishes with the duration of the thermal treatment. Orig. art. has: 1 table, 4 figures, and 1 formula.

ASSOCIATION: none

SUBMITTED: 09Oct64

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 007

Card <sup>KC</sup> 2/2

L 10368-65 ENG(j)/ENT(m)/EPF(c)/EPR/ENP(b) Pr-4/PS-4 AFWL/AFMDC/AS(mp)-2/  
~~ESD(gs)/AEDC(a)/SSD/AND/ESD(4)/RAEW(c)-IR~~

ACCESSION NR: AP4046635

8/0181/64/006/010/3148/3150

AUTHORS: Iglitsy\*n. M. I.; Kekelidze, G. P.; Lazareva, G. V.

TITLE: Determination of the oxygen content in silicon by the  
 lithium diffusion method 21 21

SOURCE: Fizika tverdogo tela, v. 6, no. 10, 1964, 3148-3150

TOPIC TAGS: silicon, oxygen balance, Hall effect, time dependence,  
 optical activity, diffusion

ABSTRACT: The concentration of "optically active" oxygen in silicon  
 can be found from the optical absorption at  $\lambda = 9.0 \mu$ . However, it  
 is not known whether this concentration represents the total oxygen  
 content or only some "active" fraction. To find the total oxygen  
 content the authors used n- and p-type silicon samples of 4.5--360  
 ohm.cm resistivity, prepared by various methods. Lithium, deposited  
 as an oil suspension on silicon, was diffused into the latter by 1

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ACCESSION NR: AP4046635

hour annealing at 800°C in pure helium. This was followed by quenching in ethylene glycol to room temperature. The Hall effect of the samples was then measured every hour for some 3500 hours. From the Hall effect the dependence of  $\log n$  ( $n$  -- the impurity carrier density) on time  $t$  was plotted. The slope of  $\log n = f(t)$  was proportional to the diffusion coefficient of lithium,  $D$ . Immediately after the diffusion annealing this coefficient was the same as in the absence of oxygen,  $D^{(0)}$ . With time, however, lithium was precipitated by oxygen in the form of  $(LiO)^+$  complexes so that  $n$  became much smaller than the oxygen concentration in silicon,  $N_O$ . Then, the diffusion coefficient [still proportional to the slope of  $\log n = f(t)$ ] became  $D = D^{(0)} / [1 + (N_O/C)]$ , where  $C$  was the dissociation constant. Thus  $N_O$  was found indirectly from the slope of  $\log n = f(t)$  at the end of observation period. The values of  $N_O$  found in this way were always considerably greater than the concentrations of "optically active" oxygen deduced from the optical absorption, and the difference increased with increase of the total

Card 2/3

L 10368-65

ACCESSION NR: AP4046635

oxygen content. The relationship between the total (diffusion) and optical values of the oxygen content was linear when plotted on double logarithmic scale. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoj promyshlennosti, Moscow (State Scientific-Research and Design Institute for Rare-Metal Industry)

SUBMITTED: 01Feb64

ENCL: 00

SUB CODE: SS

NR REF SOV: 000

OTHER: 006

Card

3/3

*Kekelidze, M.A.*

✓ The characteristics of Sadakhlo, Adgametu, and Motsa-  
metu carbonates. M. Kekelidze, A. Arkhenishvili, V.  
Perova, and S. Mambeladze. *Izudy Inst. Metall.*  
*Gornogo Dela, Akad. Nauk Gruzii, S.S.R. 2, 175-180 (1946) (in*  
*Georgian).*—The carbonates of these deposits contain CaO  
52%, sometimes even the theoretical amount, and MgO  
1-3%. Carbonates from Darkvet contain CaO 45-7% and  
MgO 6.5-7.6%.  
M. Charmandarian

③

*MA*



*Kakel'dzer MA.*

The Production of Ferromanganese using Chisturak Carbonate Manganese Ores. A. Yu. Arzentshvil, N. G. Boiko, V. V. Perova, D. F. Filonenko and A. N. [illegible]. *Metel* 6  
Akad. Nauk SSSR. O T N 1956, 11, 5-12. (in Russian). A short description of Chisturak carbonate manganese ores is given. Experimental production of ferromanganese from burdens containing them is described. The results obtained indicated that the ore has a high efficiency of furnace operation and can be used for the production of ferromanganese. *of*

Utilization of Chlorine manganese ore for smelting of  
silicomanganese

201

K. K. Litz, M.D.

*metal* Sakhalin limestones in respect to their suitability for blast-furnace smelting. M. A. Kuznetsov, V. A. Vasyunov, V. I. Veli, and V. V. Perova. Inst. Metall. and Metall. Ind. (1955) in Russian. The Sakhalin limestone is a brown, massive, crystalline, medium-grained, gray form. It is composed of 50% or less and fairly high in iron content. The stone is suitable for use in blast-furnace smelting, but it is not recommended for use in the production of pig iron, owing to low porosity and requires a high temperature for decarburization. The stone is not suitable for use in the production of pig iron, owing to low porosity and requires a high temperature for decarburization. The stone is not suitable for use in the production of pig iron, owing to low porosity and requires a high temperature for decarburization.

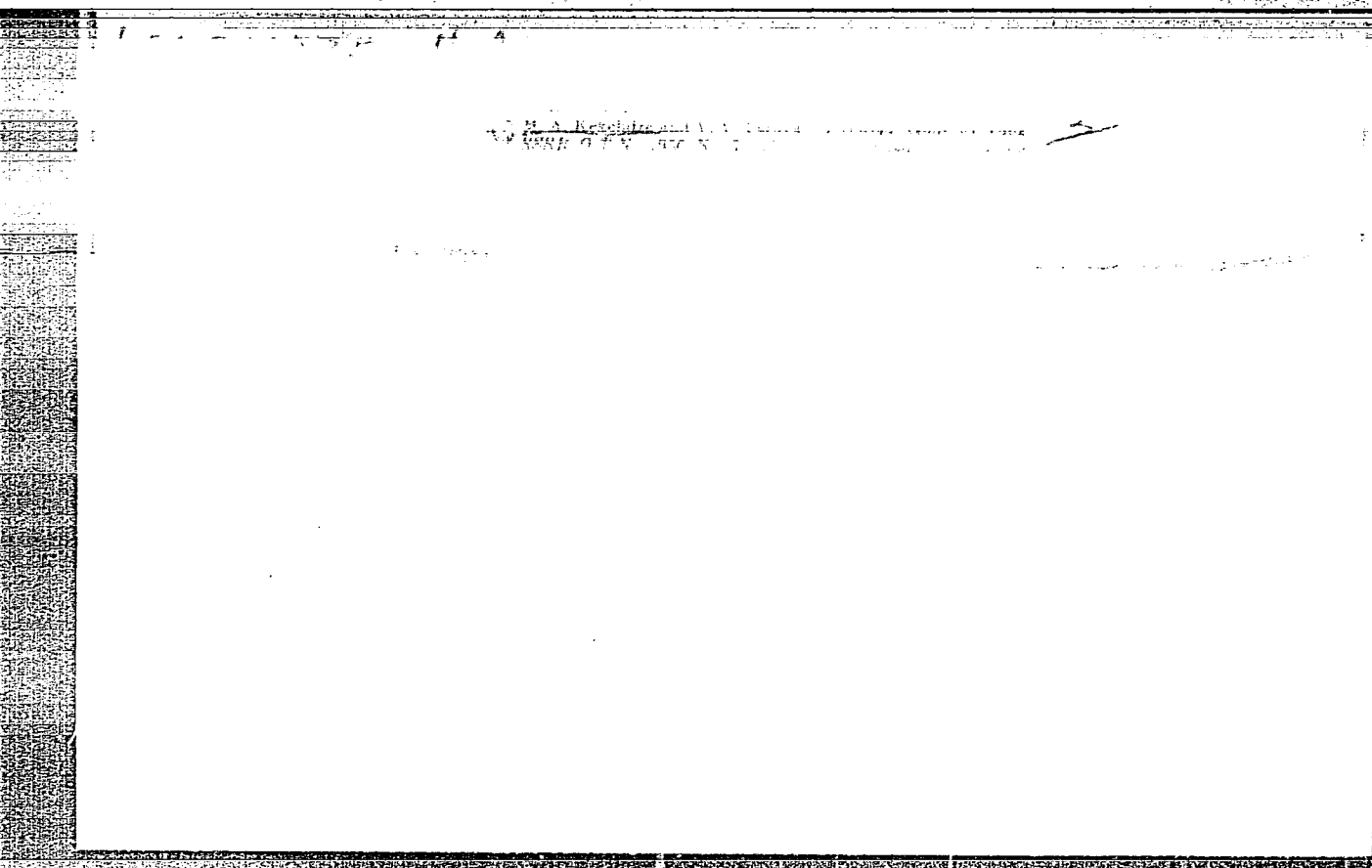
3

KEKELIDZE, N. A.

Name : KEKELIDZE, N. A.  
Dissertation : Studying Chiatura manganese ores from  
the metallurgical point of view  
Degree : Doc Tech Sci  
Defended At : Acad Sci USSR, Inst of Metallurgy imeni  
A. A. Baykov  
Publication Date, Place : 1956, Moscow  
Source : Knizhnaya Letopis' No 6, 1957

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CIA-RDP86-00513R000721420012-2



APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721420012-2"

KEKELIDZE, N.A., kandidatei tekhnicheskikh nauk; MCHEDLISHVILI, A.I., inzhener;  
~~PEROVA, N.Ye.~~, inzhener; DUNAYEV, N.Ye., inzhener; TAVROG, B.A., inzhener.

Using Chiatura oxidized manganese ores in open-hearth pig iron burden.  
Metallurg. no.9:39-40 S '56. (MLRA 9:10)

1. Institut metalli i gornogo dela Akademii nauk GSSR (for Kekelidze, Mchedlishvili, Perova). 2. Stalinskiy metallurgicheskiy zavod (for Dunayev and Tavrog).  
(Cast iron--Metallurgy) (Chiatura--Manganese ores)

KKEL 107 E 11 H

Experimental tests were made of the following:

[illegible]

КЕРЛИНГ В.

Инд. наук Грузинской ССР. Инст. металл. и хим. анализа. Тбилиси.



SOV/137-57-11-20824

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 26 (USSR)

AUTHORS: Kekelidze, M.A., Perova, V.V.

TITLE: Optimum Conditions for Sintering of First-grade Washed Chiatura Manganese (Optimal'nyye usloviya aglomeratsii chiaturskoy mytoy margantsevoy rudy I sorta)

PERIODICAL: Soobshch. AN GruzSSR, 1956, Vol 17, Nr 10, pp 905-012

ABSTRACT: Experiments are run on a laboratory sintering machine consisting of 6 pans (4 of 100-mm diameter and 2 of 200-mm diameter). The pans are 460 mm above the grate bars. The mix is readied in a mixer drum 0.4 m in diameter and 0.8 m long. The drum is mounted at an angle to its axis to attain better mixing of the material. It is found that the best results of sintering are attained with a mix consisting 80% of washed Mn ore, 20% of return fines, and with 4.5% C and 7.4% moisture in the mix, the sinter layer being 300 mm thick and the initial suction beneath the grate bar being 800 mm water column. The optimum rate of sintering is 45-46 mm/min, in which case the yield of good sinter is 65-67% and rate of output is 3.1-3.2 t/m<sup>2</sup>·hr. The resultant sinter is of the following chemical

Card 1/2

SOV/137-57-11-20824

Optimum Conditions for Sintering (cont.)

composition (%): Mn 51.19, SiO<sub>2</sub> 10.20, and P 0.19, the barrel test index being 18-21%.

A.Sh.

Card 2/2

REBELLE, Mikhail Alekseyevich (Inst of Metals & Mining, AS, USSR)  
awarded sci degree of Doc Tech Sci for 25 Apr 57 defense of disser-  
tation: "Study of manganese ores of Chitura from the metallurgical  
point of view" at the Council, Inst of Metallurgy imeni Baykov, AS,  
USSR; Prot No 6, 15 Mar 58.

(BMVO, 7-58,21)

137-58-6-11350

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 13 (USSR)

AUTHORS: Kekelidze, M.A., Perova, V.V.

TITLE: Production of Sinter from Dashkesan Magnetite Concentrates  
(Polucheniye aglomeratov iz dashkesanskikh magnetitovykh kontsentratov)

PERIODICAL: Tr. In-ta metalli i gorn. dela. AN GruzSSR. 1957, Vol 2,  
pp 15-24

ABSTRACT: A study is made of the influence of the fundamental factors on the process of sintering Dashkesan magnetite concentrate. A description is adduced of an experimental plant and also of the experimental methodology. Coke breeze was the fuel used. Sinter >15 mm in size was deemed acceptable. Concentrate of the following % composition: SiO<sub>2</sub> 14.86, Al<sub>2</sub>O<sub>3</sub> 3.95, CaO 9.76, MgO 0.56, ferrous Fe 19.54, Fe 50.01, P 0.05, and S 0.04 yielded sinter of the following % composition: SiO<sub>2</sub> 15.92, Al<sub>2</sub>O<sub>3</sub> 3.91, CaO 10.26, MgO 0.46, ferrous 19.25, P 0.05, and S 0.01. The optimum charge for obtaining quality sinter from concentrate of the 2-0 mm class is: 70-75% concentrate, 20-25% return fines, 3.5-4% C in the charge with a charge

Card 1/2

137-50-6-11350

Production of Sinter from Dashkesan Magnetite Concentrates

moisture content of 4.5-5%, sintering bed thickness 200-250 mm and a suction of 800-900 mm water column beneath the sinter grate. The downward motion of the burning zone was 21.4-22.7 mm/min, the yield of good agglomerate was 80.3-82.9%, the output of the plant was 1.61-1.82 t/m<sup>2</sup> hr. and the size of the ball mill test was 26.0-23.5%.

A.Sh.

1. Magnetite--Sintering
  2. Sintering plants--Equipment
  3. Sintering plants
- Performance

Card 2/2

137-58-6-11278

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 3 (USSR)

AUTHORS: Kekelidze, M. A., Arsenishvili, A. Yu.

TITLE: An Investigation of the Manganous Sandstones of Chiatura (Issledovaniye chiaturskikh margantsovistykh peschanikov)

PERIODICAL: Tr. In-ta metalla i gorn. dela. AN GruzSSR. 1957, Vol 8, pp 53-58

ABSTRACT: The object of this work is a study of the chemical and mineralogical composition and of certain physical and mechanical properties of the low-grade manganous sandstones (MS) of Chiatura. Methods of utilizing them in the smelting of silicon-manganese are outlined in this work. The MS of Chiatura are characterized by low Mn contents (11-18%) and high silicon contents (50-67%). The  $Al_2O_3$ , CaO, and P contents vary widely. The major non-orebearing minerals are quartz and calcite. The Mn minerals are pyrolusite, recrystallized Mn hydroxides and psilomelane. The average sp. gr. of the MS is 2.3-2.7, volumetric weight is 2.0-2.5, porosity is 5.2-16.2. Pulverizability tests of the MS showed the amount of <5 mm fines to be 6.6-10.0% and the  $\sigma_{bcompress}$  to be 99-478 kg/cm<sup>2</sup>. When the use

Card 1/2

137-58-6-11278

An Investigation of the Manganous Sandstones of Chiatura

of chalcedony was supplanted completely by that of MS, grade CuMn-20 silicon-manganese was obtained.

A. Sh.

1. Manganese ores--Properties
2. Manganese ores--Applications
3. Rock--Analysis

Card 2/2

SOV/137-58-10-20784

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 62 (USSR)

AUTHORS: Kekelidze, M.A., Arsenishvili, A.Yu.

TITLE: Experiments in the Smelting of a Silicon-manganese-calcium Alloy (Kuznetsk Metallurgical Kombinat) [Opyty po vyplavke kremne-margantsovo-kal'tsiyevogo splava (KMK)] in Georgian

PERIODICAL: Soobshch. AN GruzSSR, 1957, Vol 19, Nr 2, pp 197-202

ABSTRACT: An experimental single-phase 25-kva arc furnace with graphite electrode and conducting hearth was used to conduct experiments in the reducing smelting of slags from the melting of medium carbon Fe-Mn of the following % composition:  $\text{SiO}_2$  31.75,  $\text{Al}_2\text{O}_3$  1.75,  $\text{CaO}$  26.6,  $\text{MgO}$  2.5,  $\text{Fe}$  0.84,  $\text{Mn}$  29.35,  $\text{P}$  0.07,  $\text{SO}_3$  0.22 with the object of producing an Si-Mn-Ca alloy useful as a complex deoxidizer of steel. When the slag is melted with 20% coke breeze, alloys having the following % composition are obtained:  $\text{SiO}_2$  22-26,  $\text{Mn}$  57-63,  $\text{Ca}$  0.8-1.1,  $\text{Al}$  2-2.5, since the slags were melted at comparatively low temperature, and this inhibited total reduction of the  $\text{CaO}$ .

Card 1/2 Addition of Fe to the charge did not promote a higher degree of

*Incl. Metals Mining AS Gruz. SSR, Tbilisi*

SOV/137-58-10-20784

Experiments in the Smelting of a Silicon-manganese-calcium Alloy

reduction of the CaO. Addition of quartz sand, and of up to 26%  $\text{CaC}_2$  to the mix yielded alloys with the following % composition: Si 35-45, Mn 29-49.5, Ca 6-7.65, but this yielded a very high-melting slag that flowed out of the furnace with difficulty. Better results were yielded by a mix consisting of slag, limestone, and quartz sand, calculated from the reaction:  
 $2\text{SiO}_2 + \text{CaO} + \text{MnO} + 6\text{C} = 2\text{Si} + \text{Ca} + \text{Mn} + 6\text{CO}$ . This yielded alloys of the following % composition: Si 44-50, Mn 25-32, Ca 10-15.5, Al 1.5-2, P 0.02-0.026, C 0.45-0.75. The percentages recovered in the alloy were: Si 40, Mn 63, Ca 20, the consumption of electrical energy being 20 kwh/kg alloy. The melting must be run with rapid heating of the mix until the onset of the reactions of reduction.

Ye.Z.

1. Calcium-manganese-silicon alloys--Production
2. Slags--Processing
3. Furnaces--Operation

Card 2/2



KEKELIDZE, M.A.; PEROVA, V.V.

Fluxed agglomerate of Dashkesan magnetites and Sadakhlo limestone.  
Soob. AN Gruz. SSR 19 no.5:587-590 N '57. (MIRA 11:6)

1. Institut metalli i gornogo dela AN Gruz SSR. Predstavleno chlenom-  
korrespondentom AN F.N. Tavadze.  
(Fluxes)

SOV/137-58-8-16450

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 31 (USSR)

AUTHOR: Kekelidze, M.A.

TITLE: Softening Temperature of the Chiatura Manganese Ores (Temperatura razmyagcheniya chiaturskikh margantsevykh rud)

PERIODICAL: V sb.: Dommennoye proiz-vo, Moscow, Metallurgizdat, 1958, pp 138-142

ABSTRACT: A description is given of an installation with a Silit furnace for the determination of the softening temperature; the temperature of material tested is recorded on the tape of a revolving drum simultaneously with the curve of the immersion (settling) of the spindle in the material. The installation was developed in the Institute of Metals and Mining, Academy of Sciences, GruzSSR. The chemical composition of the ores and agglomerates investigated is adduced together with the curves of their softening in air and in an H<sub>2</sub> current.

1. Manganese ores--Mechanical properties    2. Manganese ores--Temperature factors    3. Manganese ores--Chemical analysis    4. Temperature--Recording devices

N.L.

Card 1/1

KEKELIDZE, M.A.; ARSENISHVILI, A.Yu.; PEROVA, V.V.; BOYKO, S.G.; TSARITSYN, A.N.

Replacing ordinary Chiatura manganese ores by Chiatura carbonate manganese ores in the burden of pig iron used for steel manufacture. Trudy Inst.met. AN Gruz.SSR 9:43-47 '58. (MIRA 12:8)  
(Chiatura--Manganese ores) (Cast iron--Metallurgy)

KEKELIDZE, M.A.; PEROVA, V.V.

Fluxed manganese sinter of Dashkesan magnetites. Trudy Inst.  
met. AN Gruz. SSR 9:33-41 '58. (MIRA 12:8)  
(Dashkesan--Magnetites) (Sintering) (Manganese)

KEKELIDZE, M.A.; ARSENISHVILI, A.Yu.; PEROVA, V.V.; KULIKOV, A.P.; TKACH, I.T.

Using Chiatura carbonate manganese ores for the production of  
pig iron used in steel manufacture. Trudy Inst.met. AN Gruz.  
SSR 9:49-57 '58. (MIRA 12:8)  
(Chiatura--Manganese ores) (Cast iron--Metallurgy)

SOV/30-48-10-6/53

AUTHOR: Kekelidze, M. A., Doctor of Technical Sciences

TITLE: Exploration of the Manganese Ores of **Georgia** (Issledovaniya **margantsavykh** rud Gruzii)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 10, pp 49-52 (USSR)

ABSTRACT: Beside the world-famous manganese ore deposits of Chiatury, which have been exploited since the past century, manganese ores have been extracted within the borders of the **Georgian SSR** also in the following places: Chkhari-Adzhameti, Tskhakaya, Tetri-Tskharo, Tsedisi, Shkmeri, and others. As to the quality the manganese ores of the **Chiatura** deposit are the best and as to yield they are among the richest in the world. A. G. Betekhtin, Member, Academy of Sciences, USSR, has done much for the exploration of this deposit, as well as G. A. Avaliani, K. Ye. Gabuniya, A. V. Gavasheli, D. P. Dolidze, G. N. Nazarov, I. I. Pataraya, V. I. Tabagari, S. S. Chikhelidze, and G. N. Nikoladze. The losses of metal in the concentration plant are still very high (up to 20-25 per cent manganese) and the output of first-grade concentrated material is comparatively low (28-32 per cent) and that of the fourth-grade comparatively

Card 1/2

Exploration of the Manganese Ores of Georgia

SOV/30-58-10-6/53

high (25-30 per cent). The problem of concentration of different kinds of ores has not yet been solved. Washed manganese ore of the first grade has the highest filling weight of 1.9-2.2 t/m<sup>3</sup>. Sinter experiments with this ore yielded satisfactory results. These deposits have still to be further explored in order to be able to process non-conditioned manganese ores (in particular carbonate ores) metallurgically. The manganese ores of the ~~Shkardi~~ deposit are similar to those of Chiatura as far as their chemical and mineralogical composition and their physical and technological properties are concerned. They have, however, been hardly tested yet. Also the other manganese ore deposits in Georgia are still to be thoroughly examined.

Card 2/2

**KEKELIDZE, M.A.**

Smelting silicon-manganese alloys from the washed Chiatura manganese ore(series 4) and its agglomerates. Soob. AN Gruz. SSR 20 no. 3:335-338 Mr '58.

1. AN GruzSSR, Institut metalla i gornogo dela, Tbilisi.  
Predstavleno chlenom-korrespondentom Akademii F.N.Tavadze.  
(Georgia--Silicon-manganese alloys)



KEKELIDZE, M.A.

Smelting ferromanganese by using agglomerates. Soob. AN Gruz. SSR  
20 no.6:683-688 Je '58. (MIRA 11:10)

1.AN Gruzinskey SSR, Institut metalla i gornogo dela, Tbilisi.  
Predstavlene chlenom-korrespondentom Akademii F.N. Tavadze.  
(Ferromanganese--Electrometallurgy) (Sintering)

KASHAKASHVILI, N.V., prof., otv.red.; GAMBASHIDZE, R.B., kand.nauk, otv.  
red.; AGIADZE, R.I., prof., red.; BERIDZE, V.M., prof., red.;  
GIGINIYSHVILI, K.M., red.; GONIASHVILI, T.B., kand.nauk, red.;  
TAVADZE, F.I., prof., red.; KIKELIDZE, M.A., doktor nauk, red.;  
MIKELADZE, G.Sh., kand.nauk, red.; NADIRADZE, Ye.M., kand.nauk,  
red. q

[Metallurgical terminology] Metallurgicheskaya terminologiya.  
Otv.red. N.V. Kashakashvili i R.B. Gambashidze. Tbilisi, 1959.  
324 p. (MIRA 13:2)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Institut yazykoznaneya.  
(Metallurgy--Dictionaries)  
(Russian language--Dictionaries--Georgian)  
(Georgian language--Dictionaries--Russian)

KEKELIDZE, M.A.; PEROVA, V.V.

Fluxed agglomerate from Chiatura oxide and carbonate manganese ores. Soob.AN Gruz.SSR 23 no.1:71-74 J1 '59. (MIRA 13:1)

1. AN GruzSSR, Institut metallurgii, Tbilisi. Predstavleno chlenom-korrespondentom Akademii F.N.Tavadze.  
(Manganese ores)

KEKELIDZE, M.A.

Refining of silicon-manganese with the help of Chiatura carbonate  
manganese ore. Trudy Inst. met. AN Gruz. SSR 10 '60. (MIRA 13:12)  
(Chiatura--Manganese ores) (Ferrosilicon--Metallurgy)

KETELIDZE, M.A.; PEROVA, V.V.

Open-hearth furnace sinter made of Dashkesan magnetite concentrates.  
Trudy Inst. met. AN Gruz. SSR 10:5-13 '60. (MIRA 13:12)  
(Open-hearth furnaces--Equipment and supplies)  
(Dashkesan--Irons ores) (Sintering)

KEKELIDZE, M.A.; DZHINCHARADZE, T.I.; ODILAVADZE, G.H.

Some metallurgical properties of Dzama iron ores.

Trudy Inst. met. AN Gruz. SSR 11:15-22 '61. (MIRA 14:10)

(Dzama Valley--Iron ores)

KEKELIDZE, M.A.; PEROVA, V.V.

Utilization of magnetic sands from the Black Sea coasts' regions.  
Trudy Inst. met. AN Gruz. SSR 11:23-30 '61. (MIRA 14:10)  
(Black Sea region—Sand—Magnetic properties)  
(Sintering)

KEKELIDZE, M. A.; DZHINCHARADZE, T. I.; ODILAVADZE, G. N.

Study of pyrite cinders of the "Ingurbumcombinat" for the purpose of determining the possibility of their use in the sintering charge. Trudy Inst. met. AN Gruz. SSR 11:31-39 '61.

(MIRA 14:10)

(Ingur Valley—Paper industry—By-products)  
(Sintering)



KEKELIDZE, M.A.; ODILAVADZE, G.H.

Metallurgical properties of dolomitized Abano limestones.  
Trudy Inst. met. AN Gruz. SSR 11:53-56 '61.(MIRA 14:10)  
(Abano--Limestone)

KEKELIDZE, M.A.; ODILAVADZE, G.N.; MGELADZE, V.D.; DZHINCHARADZE, T.I.;  
GELASHVILI, K.D.

Use of pyrite cinder from the Ingur Paper Combine in the production  
of basic iron. Trudy Inst.met. AN Gruz. SSR 12:3-17 '62.

(MIRA 15:12)

(Ingur Valley—Paper industry—By-products)  
(Cast iron—Metallurgy)

KEKELEDZE, M.A.; PEROVA, V.V.; GELASHVILI, K.D.; DZHINGHARADZE, T.I.;  
ODILAVADZE, G.N.

Results of the industrial sintering of washed Chiatura 1 ~~C~~ manganese  
ores. Trudy Inst.met. AN Gruz. SSR 12:19-28 '62. (MIRA 15:12)  
(Chiatura region—Manganese ores) (Sintering)

KEKELIDZE, M.A.; PEROVA, V.V.

Comparative characteristics of the rate of sintering of Chiatura  
manganese ores. Trudy Inst.met. AN Gruz. SSR 12:29-34 '62.

(MIRA 15:12)

(CHIATURA—MANGANESE ORES)

(SINTERING)

DZHINCHARADZE, T.I.; KEKELIDZE, M.A.

Some metallurgical characteristics of manganese ores from the  
Shkmeri deposit. Trudy Inst.met. AN Gruz. SSR 12:196-203 '62.  
(MIRA 15:12)

(Shkmeri region—Manganese ores)

KEKELIDZE, M.A.; PEROVA, V.V.; ODILAVADZE, G.N.; DZHINCHARADZE, T.I.; GELASHVILI,  
K.D.; MGELADZE, V.D.

Industrial sintering of washed fourth grade Chiatura manganese ore.  
Trudy Inst. met. AN Gruz. SSR vol. 13:3-5 '62. (MIRA 17:9)

KEKELIDZE, M.A.; DZHINCHARADZE, T.I.

Preparing ferromanganese and siliconmanganese from manganese  
ores of the Shkmeri deposit. Trudy Inst. met. AN Gruz. SSR  
vol. 13:7-16 '62. (MIRA 17:9)

KEKELIDZE, M.A.; SIGUA, T.I.

Sinter with various basicity of magnetite sand concentrates from  
the Black Sea Coastal region. Trudy Inst. met. AN Gruz. SSR vol.  
13:17-24 '62. (MIRA 17:9)



KEKELIDZE, M.A.; GOGIBERIDZE, Yu.M.

Deoxidation of pipe grades of steel by silicomanganese prepared  
from washed, fourth-grade, Chiatura manganese ore. Trudy Inst.  
met. AN Gruz. SSR vol. 13:25-31 '62. (MIRA 17:9)

KEKELIDZE, M.A.; MGELADZE, V.D.

Preparing silicomanganese from washed, fourth grade "mtsvari" and oxidized Chlatura manganese ores. Trudy Inst. met. AN Gruz. SSR vol. 13:33-44 '62. (MIRA 17:9)

KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.; ODILAVADZE, G.H.

Investigating the viscosity of synthetic magnesia blast furnace  
slags. Trudy Inst. met. AN Gruz. SSR vol. 13:51-56 '62.  
(MIRA 17:9)

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Interfacial tension at the boundary separating Fe-F alloys from  
MnO-SiO<sub>2</sub> melts. Soob. AN Gruz. SSR 32 no. 1:117-124 0 '63.  
(MIRA 17:9)

1. Institut metallurgii AN GruzSSR, Tbilisi. Predstavleno  
akademikom F.N.Tavadze.

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Effect of phosphorus on the surface tension and density of  
iron. Soob. AN Gruz. SSR 31 no.1:125-130 J1 '63. (MIRA 17:7)

1. Institut metallurgii AN Gruzinskoy SSR. Predstavleno aka-  
demikom F.N. Tavadze.

BELIKOV, Yu.V.; KEKELIDZE, M.A.; KRASNYKH, I.F.; SIGRIDZE, G.Ya.; KHITRIK, S.I.; SHATIRISHVILI, G.A.; SHIRER, G.B.

Making silicon-manganese alloys from sintered 2d and 3d-grade concentrates of the Nikopol' deposit. Stal' 24 no.2:140-143 F '64.  
(MIRA 17:9)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721420012-2"

ACC NR: AP7000259

SOURCE CODE: UR/QJ37/66/000/011/0067/0068

AUTHOR: Pruidze, V. G.; Kekelidze, N. A.

ORG: Georgian NII for the Food Industry [Gruzinskiy NII pishchevoy promyshlennosti]

TITLE: The use of a bay leaf preparation in the production of canned and preserved fish

SOURCE: Rybnoye khozyaystvo, no. 11, 1966, 67-68

TOPIC TAGS: food chemistry, food preservation, food technology, processed plant product, food product machinery

ABSTRACT: Bay leaf, widely used as an aromatic condiment in the manufacture of food products, has an essential oil content ranging from 0.5% to 4.5% of dry substance, with the result that a consignment of canned goods, or other types of products, often varies in aroma from unit to unit. This creates consumer dissatisfaction. Too, bay leaf is hard to transport, store, sort, wash, etc. This has led to experimentation to determine the possibility of using the essential oil itself in food products. Extraction procedure is discussed, difficulties in the use of the pure oil are noted, and foreign practice in the use of dry preparations containing the essential oils of the particular condiments is discussed. The Soviet procedure used to manufacture the preparation in powder and tablet form is described, as is the

KERELIDZE, N. P.

"Consequences of Nuclear Transformations in Germanium  
Monocrystals Irradiated with Slow Neutrons."

paper submitted for the Symposium on the Chemical Effects of Nuclear Transforma-  
tion (IAEA) Prague, 24-27 Oct 1960.

38358

S/058/62/000/005/083/119  
A061/A101

AUTHOR: Kekelidze, N. P.

TITLE: Some electrophysical properties of germanium single crystals at low temperatures

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 26, abstract 5E212  
("Tr. Tbilissk. un-ta", 1960, v. 86, 375 - 389, English summary) f

TEXT: n-type germanium was examined for the temperature dependence of the Hall coefficient  $R(T)$ , of specific resistance  $\rho(T)$  and of mobility  $\mu(T)$  in the range from room temperature to liquid-helium temperature. Using the  $R(T)$  function, the donor and acceptor concentrations were determined, and the results were used for the analysis of mobility. In specimens with a total impurity concentration  $N \sim (10^{14} - 10^{15}) \text{ cm}^{-3}$ , the scattering by thermal lattice vibrations prevailed over that by ionized impurities up to 10 - 20°K. At a concentration of  $N \sim 10^{16} \text{ cm}^{-3}$ , the scattering of carriers by ions began to show distinctly already at 78°K. In noncompensated material with  $N = 1 \cdot 10^{14} \text{ cm}^{-3}$ , the curve  $\mu = f(T)$  displayed two maxima at low temperatures. Ge was bombarded with slow neutrons in

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Some electrophysical properties of...

a reactor. The initial materials were crystals with intrinsic conductivity, which were turned into p-type Ge by bombardment. Lattice imperfections due to bombardment were eliminated by a lengthy thermal treatment at 450°C. The dependence of the Hall coefficient  $R$  on the magnetic field  $H$  was examined. The high-field condition was found to be almost realized at liquid-hydrogen temperature in a specimen where  $N \sim 10^{15} \text{ cm}^{-3}$  for  $H \sim 6 - 7$  kilogauss. The concentrations of Ga and As formed by nuclear transformations were calculated and found to be in good agreement with measured values of the  $R(T)$  function. The impurity conductivity was examined. Results agree qualitatively with the theory by Khang, Conwell, and Mott. A low-temperature measurement technique is described. f

[Abstracter's note: Complete translation]

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KEKELIDZE, N. P.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences at the Physics Institute imeni P. N. Lebedev in 1962:

"Separate Determination of Donor and Acceptor Concentrations in Germanium and Silicon and the Study of Several Electrophysical Properties of the Semiconductors at Low Temperatures."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

KEKELIDZE, N.P.

Experimental apparatus for studying the electric properties of  
semiconductors at low temperatures. Soob. AN Gruz. SSR 40 no.2:  
311-317 N '65. (MIRA 19:1)

1. Tbilisskiy gosudarstvennyy universitet. Submitted April 20,  
1965.

L 23845-66 EMT(1)/T/EWA(h) IJP(c) AT

ACC NR: AP6015270

SOURCE CODE: UR/0251/65/040/002/0311/0317

AUTHOR: Kekelidze, N. P.

ORG: Tbilisi State University (Tbilisskiy gosudarstvennyy universitet)

TITLE: Experimental setup for the study of the electrical properties of semiconductors at low temperature

SOURCE: AN GruzSSR. Soobshcheniya, v. 40, no. 2, 1965, 311-317

TOPIC TAGS: Hall effect, semiconductivity, temperature dependence, magnetoresistance electrometry

ABSTRACT: <sup>21</sup> The study of semiconductor properties at low temperature <sup>21</sup> is of great importance for the study of current carrier transfer and of other effects which appear only at very low temperatures. Consequently, the author developed an experimental setup described in the paper which permits the study of the temperature dependence of conductivity, of the Hall effect, Carrier mobility, magnetoresistance, and the like within the wide temperature interval of 300-1.5 oK. The bases for the construction of the present device can be found in papers published earlier (E. I. ABAULINA-ZAVARITSKAYA, ZhETF (Journal of Experimental and Theoretical Physics) 36, 1959, 1342; N. P. KEKELIDZE, Trudy Tbilisskogo gosudarstvennogo universiteta (Reports of the Tbilisi State University), 86, 1960, 375; 86, 1960, 391). The report describes the complex potentiometric

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ACC NR: AP6015270

measuring device, the alternate electrometric measuring scheme  
(for the  $10^5$ - $10^{10}$  ohm region) and two versions of cryostats.  
Test measurements yielded very accurate results (published else-  
where) of semiconductor characteristics at low temperature.  
This paper was presented by Corresponding member AN CruzSSR, academician  
M. M. Mirianash on 20 April 1965. Orig. art. has: 4 figures. [JPRS]

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